

Remarks

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and the remarks presented below.

A. Amendments to the Claims

Claim 6 has been amended to be dependent upon claim 1, rather than claim 5, since none of the new elements introduced in claim 5 appear in claim 6.

Claim 23 has been amended to be dependent upon claim 17, rather than claim 22, since none of the new elements introduced in claim 22 appear in claim 23.

Prior to this amendment, the two claims 12 and 14, both of which depend upon claim 11, were separated by claim 13 which depends upon claim 10. This ordering of the claims was confusing to one reading through the claims and expecting each claim to be immediately followed by all of its dependent claims grouped together. Likewise, prior to this amendment, the two claims 27 and 29, both of which depend upon claim 26, were separated by claim 28 which depends upon claim 25. This was also confusing to one reading through the claims for the same reason.

To make the claims easier to read through and to understand, applicants have elected to switch the positions and the claim numbers of claims 13 and 14 and to switch the positions and the claim numbers of claims 28 and 29. This repositioning and re-numbering causes all the claims dependent upon claim 11 to be positioned together immediately following claim 11; and likewise it causes all of the claims dependent upon claim 26 to be positioned together immediately following claim 26. This does not change the wording or the substantive content of these claims in any way. Approval of this change is respectfully requested.

Applicants have added the word “further” to each of the claims 12, 13, and 14 and also to the claim 27, 28, and 29 to clarify their wording and meaning with respect to the wording of the claims 10, 11, 25, and 26 which they depend upon (directly or indirectly). For example, claim 10 reads “wherein processing comprises...” and newly amended

claim 14, which depends upon claim 10, now reads: “wherein processing further comprises....” Likewise, claim 11 reads: “wherein the workflow comprises...” and newly amended claim 13, which depends upon claim 11, now reads: “wherein the workflow further comprises....” The changes made to the remaining claims in this set (12, 27, 28, and 29) are the same as the changes just described. Approval of these clarifying amendments is respectfully requested.

B. The Claims are not Anticipated by the Eicher, *et al.* Published Application No. 2002/0099580

The Examiner has rejected claims 1, 3-12-13, 15-20, 22-23, 27-28, 30-32, 34-37, and 42-50 under 35 U.S.C. §102(e) as being anticipated by patent application No. 2002/0099580 A1 which was published on July 25, 2002 and which was filed by Daryl E. Eicher, Jr., *et al.* on January 22, 2001. (Hereinafter “Eicher, *et al.*”) The Examiner has also rejected the remaining claims 2, 14, 21, 29, 33, and 38-44 under 35 U.S.C. §103(a) as unpatentable over this same reference in combination with one of two references (Huang, Eric *et al.*, “Development of a Collaborative and Event-Driven Supply Chain Information System Using Mobile Object Technology,” Proceedings of the 1999 IEEE Intl. Conf. on Robotics & Automation, Detroit, Mich., May 1999; and U.S. Patent No.7,069,235 which issued to Postelnik *et al.* on June 27, 2006). (The Examiner should note that, following the present amendment, the Examiner’s §102(e) rejection now applies to claims 13 and 28 while the Examiner’s §103(a) rejection now applies to claims 14 and 29, due to the re-numbering of these claims which was explained above in section A, paragraphs 2 and 3, of this response.)

Reconsideration of these two grounds for rejection is respectfully requested for the following reason: The Eicher, *et al.* application does not disclose a Supply Chain Management System at all. It discloses a transaction monitoring system. After transactions have been completed by other means not disclosed in the Eicher, *et al.* application, Eicher’s apparatus extracts data from records of the completed transactions and transforms this data into reports that indicate how well the partners to a series of transactions have performed. For example, an illustrative report, shown in Figure 16

(below), indicates the percentage of “On-time-shipments” as well as the percentage of “Perfect Order[s]” for each of several trading partners:

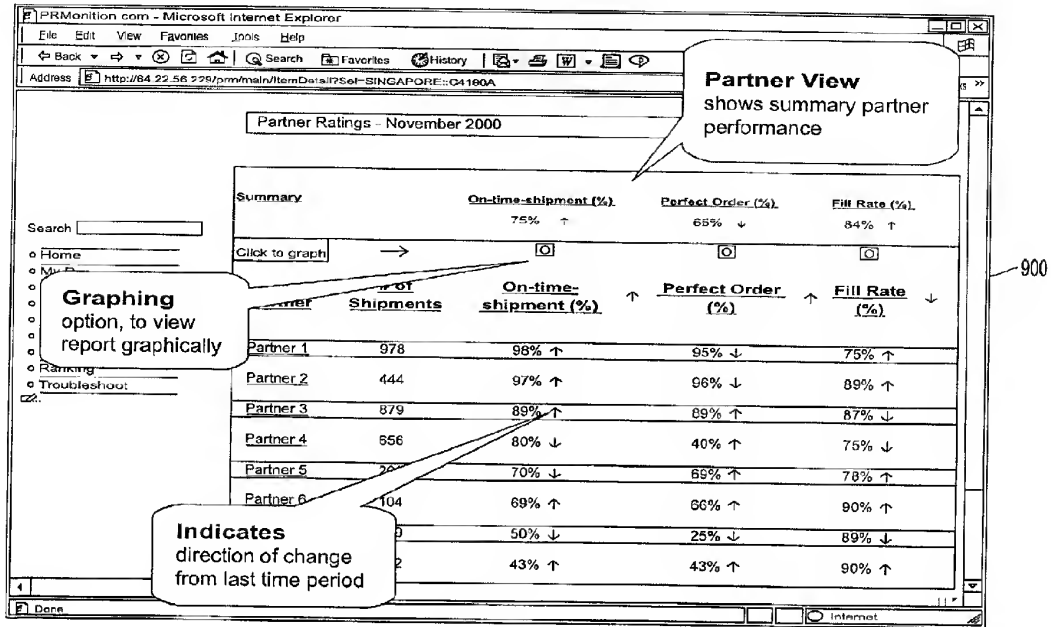
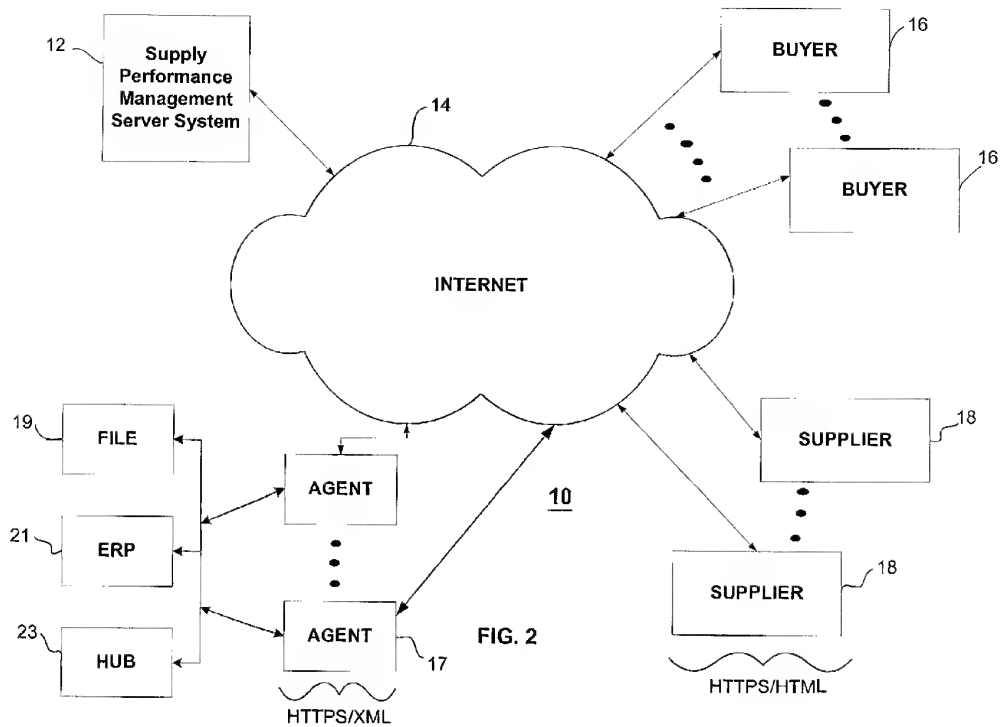


FIG. 16

Figure 2 of the Eicher, *et al.* application, reproduced at the top of the next page, reveals in overview how the records of completed transaction are collected:



In this figure, buyers 16 and suppliers 18 are actively buying and selling across the Internet 14, using tools that are not disclosed in the Eicher, *et al.* application. Agents 17 intercept or retrieve files descriptive of completed transactions that have occurred, extract data from these files, and then pass the data on to a server system 12, which generates reports such as the typical report shown in Figure 16 of Eicher, *et al.* (previous page). The Eicher, *et al.* apparatus is thus confined entirely to the data gathering agents 17 and to a Supply Performance Management Server System 12 that is shown in the upper-left corner of Figure 2 (above). The Eicher, *et al.* system thus does not actively participate in any actual trading. It simply sits off to the side, monitoring and recording some of the results of such trading.

Figure 20 of Eicher, *et al.* is reproduced below:

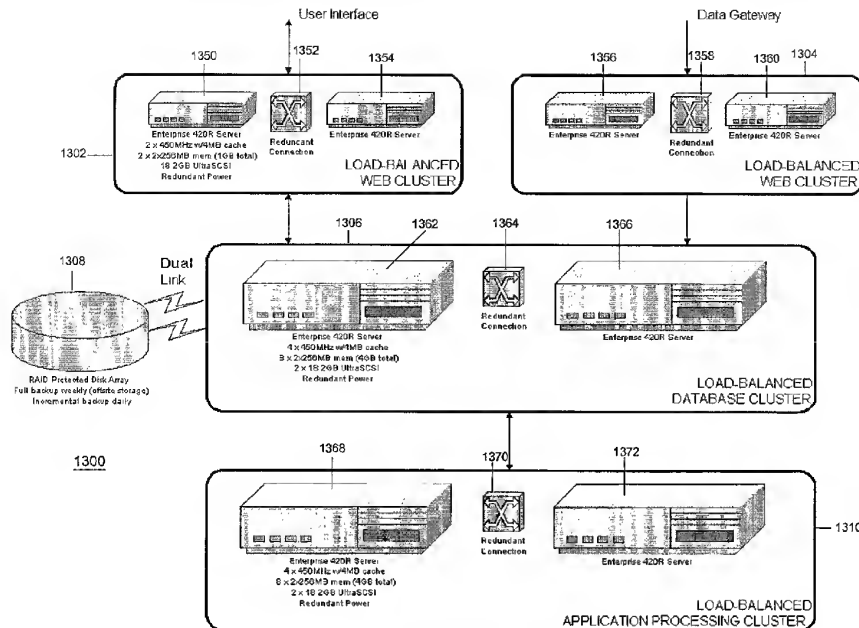


Fig. 20

All of the hardware components of the Eicher, *et al.* apparatus are fully disclosed in this figure. Records of completed transactions flow into this apparatus over the downward pointing arrow labeled “Data Gateway” that appears in the upper right portion of this figure. Note that this arrow points only downwards into the system – it is not a bidirectional arrow that also points back out towards the Internet and towards the computers of the buyers and suppliers who are actually carrying out transactions. This demonstrates that the Eicher, *et al.* apparatus gathers only data concerning completed transactions – it plays no part in carrying out any purchases or sales. The Eicher, *et al.* apparatus is simply an observer of the completed transactions.

Figure 19(b), reproduced on the next page, presents the details of the Eicher, *et al.*’s agent system that actually gathers records of completed transactions and then extracts data from these records relating to completed transactions:

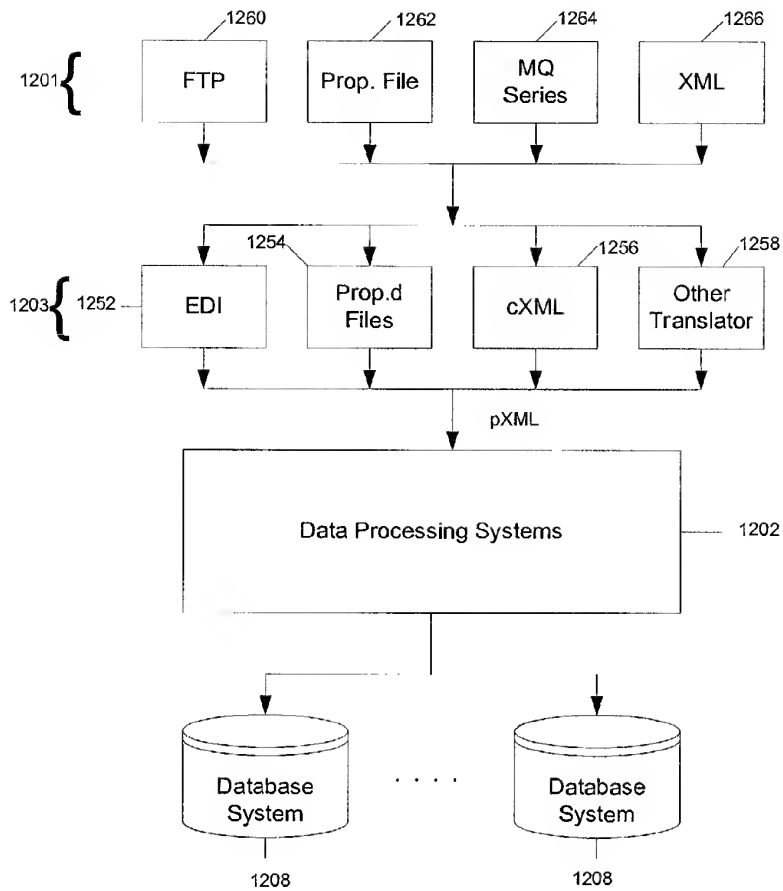


Figure 19

(b)

Once again, the arrows entering this figure from the top indicate clearly that the Eicher, *et al.* agents simply gather and examine records relating to transactions that have already occurred and do not take an active part in trading.

The agents “are built with two layers of abstraction”: “First the data collection layer” 1201; and then “the data translation layer” 1203. (Eicher, *et al.*, paragraph 130.) The incoming records may be formatted in a variety of ways: “FTP 1260, flat files 1262, MQ series 1264, and XML collection 1266.” (Eicher, *et al.* paragraph 132); and the records all require translation: “EDI translator 1252, Proprietary file format translators

1254, cXML translators 1256, and other translators 1258 as well.” (Eicher, *et al.* paragraph 133). The extracted and translated data is placed into a repository from which summary reports of performance quality, such as the report shown above in Figure 16, can be generated.

All of the claims presently before the Examiner require actual participation in the execution of a transaction involving an enterprise and at least one partner. Independent claim 1 calls for “receiving a request for the transaction from an end-user ...” and “processing the request in the context for the transaction.” Independent claim 32 calls for “an execution process engine operable to execute a respective workflow in the context for each transaction, each workflow comprising a plurality of tasks to be performed by the enterprise or the partner in order to fulfill the respective transaction.” Independent claim 38 requires “at least one process workflow executing on a processing facility, the process workflow operable to process the transaction;” And independent claim 41 calls for “a network execution component operable to administer a transaction involving an enterprise and at least one partner in the supply chain; ...”

Since the Eicher, *et al.* apparatus never carries out any sales transaction but simply analyzes records of past transactions (carried out in ways not disclosed in Eicher, *et al.*), the apparatus disclosed in the Eicher, *et al.* published patent application does not satisfy the requirements (quoted above) found in all of the independent claims.

In addition, all of the independent claims call for the use of “real-time” data when a transaction is processed. Claim 1 calls for “accessing real-time data relevant to the transaction” and “generating a context for the transaction using the real-time data....” Claim 32 calls for “a database operable to store real-time data relating to the one or more transactions” and “an execution process engine operable to execute a respective workflow in the context for each transaction using the real-time data....” Claim 38 calls for “a database operable to store real-time data relating to the transaction” and “a data access layer operable to provide the process workflow access to the real-time data relating to the transaction....”

Since the Eicher, *et al.* apparatus simply extracts data from records of transactions that are already completed, it does not need to operate in “real time.” It can take its time scanning reports of transactions or seeking information from data bases. Critical warnings may be sent out by e-mail, by pager, and by telephone (Eicher, *et al.*, paragraph 138) – clearly, these are not “real-time” reports. Eicher, *et al.* teach that “subsequent activities within the server” may be “set in motion by the arrival of data or a predetermined schedule.” (Eicher, *et al.*, paragraph 134). Clearly, doing things on a predetermined schedule is not the same as doing things in “real time” as all of the claims require.

C. Claims 1, 17, and 41 are Patentable over Eicher, *et al.*

With respect to independent claims 1, 17, and 41, the Examiner states that Eicher, *et al.* discloses “accessing real-time data relevant to the transaction from an existing partner system” in paragraphs 24, 165, and 188 of the Eicher, *et al.* published application. (Office Action mailed 5/18/2007, page 3, lines 4-5.) But the reason claim 1, for example, requires “accessing real-time data relevant to the transaction” (claim 1, line 4) is so that this data may “generate a context for the transaction” (claim 1, line 6) to enable “processing the request [the request is “for the transaction received from an end-user or partner” – claim 1, line 3] in the context for the transaction.” (Claim 1, line 7). Eicher, *et al.*, contrary to this, does not teach gathering data for the purpose of processing a request for any transaction in the paragraphs cited by the Examiner. Paragraph 24 teaches that Eicher, *et al.* routes communications between buyers and suppliers through his server system “to enable the monitor module and collaboration modules to access communications between the buyer and supplier.” Monitoring, as explained above, is not done to facilitate the processing of transactions, but rather to facilitate the determination of the quality of transactions that have already occurred – for example, determining what percentage of deliveries are on time. And the “collaboration module” also plays no part in facilitating the actual processing of transactions. Its function is explained in the following passage:

When an issue with respect to the KPI [key performance indicators, such as percentage of on-time deliveries] is determined, a collaboration may be

initiated with various participants being invited to an open, secure, on-line environment where the issue may be resolved. ... (Eicher, *et al.*, par. 26 – emphasis added)

This “collaboration” is further explained in paragraph 165, which the Examiner has cited. But collaboration meetings to discuss problems do not process requests for transactions, as claim 1 requires. And paragraph 188, cited by the Examiner, explains that the Eicher, *et al.* apparatus improves trading arrangements by “reducing the time and cost of ensuring quality of service” This paragraph lists other benefits all of which arise from features of the Eicher apparatus that assist one on selecting trading partners (note, in Figure 6, the access provided at 220 to Dun & Bradstreet and to Hoovers, for example) and on monitoring quality of performance parameters. This paragraph does not say that the Eicher apparatus carries out actual market transactions, as all the claims all require.

Paragraph 188 includes the phrase “real-time,” but the phrase is used in the context of “buyers and sellers are connected to the right partners in real time ...” The actual trading connections between the buyers and sellers are not provided by the Eicher, *et al.* apparatus, as was explained above, but by other undisclosed trading mechanisms. Eicher, *et al.* may help one to choose “the right partners” by providing access to Dun & Bradstreet and to Hoovers (see preceding paragraph) and by providing access to “key performance indicators” derived from historical data of past transactions. This paragraph also does not say that the Eicher apparatus carries out actual market transactions, as the claims all require.

Accordingly, claims 1, 17, and 41 are in condition for allowance.

D. Claim 2 and 41 Are Patentable over Eicher, *et al.* and Huang

On page 9 of the Office Action mailed on 5.18/2007 (lines 2-8), the Examiner admits that the Eicher, *et al.* published application do not disclose a “coordinator component integrated with the existing partner system.” He says this in regard to claim 2, but claim 41 also contains this same language. The Examiner cites pages 1776-1781 of Huang as disclosing information integration in a supply chain comprising of a component integrated with supply chain members.”

The “partner coordinator component integrated with the existing partner system” of claim 2 and the “partner coordinator component integrated with an existing system of the partner to provide real-time data relevant to the transaction from the existing system of the partner to the network execution component” of claim 41 is an element numbered 180 in Figures 6 and 11, 150 in Figure 5, and 228 in Figure 8 and 10. It is shown in full detail at 180 in Figure 11, where it connects the partner’s ERP (enterprise resource planning computer), CRM (customer relationship planning computer), and RDBMS (relational data base management system) to the central network domain 14 (Figures 1, 4, 6, 8, and 10) of the present invention. It is described in the specification beginning on line 16 of page 320 and continuing on through line 13 on page 33.

Briefly described, the partner coordinator component contains an adaptation component that converts or adapts data between a format that usable and understood by the existing partner applications (ERP, CRM, and RDBMS) and a format that is usable and understood by the components residing in the network domain 14 (page 31, lines 17-20). It contains a validation component 262 that can

... validate data relating to any give[n] transaction against a context ... [or] process state that is maintained for such transaction. For example, if a purchase order to a supplier specifies 100 units of a particular product at a price of \$1.00 per unit, a validation component 262 will review or validate any confirmation received from the supplier to ensure consistency with the purchase order in terms of quantity (100) and cost (\$1.00 per unit).” (page 31, lines 22-27 – Emphasis added).

It contains a transformation component 264 that transforms the data to the network domain using XML messages (page 30, lines 29-30) and a routing component 270 that determines which existing partner system (ERP, CRM, and RDBMS) should handle a particular incoming message should go to (page 30, lines 31-34).

Applicant has studied the lengthy Huang article cited by the Examiner but so far has found nothing comparable to the partner coordinating component 180 just described. A “legacy system” is shown in Figure 9 on page 1780, and the text at the top left on page 1781 says: “A Subcontractor also uses an Inter-Company AC [Agent Component] to enable the Legacy System to integrate with the SCIS,” but no further details concerning

the “Inter-Company AC” are provided. In particular, there is no teaching of validation against the context of a transaction, as required by claims 1 and 2; and there is no teaching of providing real-time data relevant to a transaction from the existing partner system of the partner, as required by claim 41. Accordingly, for these reasons in addition to those stated above, claims 2 and 41 are believed to be in condition for allowance.

Claim 38-40 are Patentable over Eicher, *et al.* and Postelnik, *et al.*

The Examiner has cited the combination of Eicher, *et al.* and U.S. Patent No. 7,069,235 (Postelnik, *et al.*) against claim 40 and its dependent claims. After indicating that Eicher, *et al.* does not disclose a “data access layer operable to provide the process workflow access to the real-time data relating to the transaction,” the Examiner cites Postelnik, *et al.* which the Examiner says discloses this element. However, this does not appear to be the case.

The “data access layer” in the present application is assigned the reference number 136 in Figure 5, where it is shown to be the underlying data storage component of the process execution unit 132 and all other components residing both in the network domain 14 and beyond that domain (see Figures 1 and 5). On page 20 of the present application (lines 28-34) it says: “The data access layer component 136 provides access for other components of the network domain 14 to ... a lightweight directory access protocol (LDAP) database 162 The ... [database] may store real-time data relating to one or more transactions and maintain a respective context for each transaction. The use of the LDAP 162 provides for the distribution of key information throughout the network 10 for access by network system components.” The Examiner will be aware that “lightweight directory access protocol” databases are directly accessible over the Internet by many system components, as in a telephone directory application. Accordingly, the “data access layer” makes the database called for by claim 38 widely accessible to other components.

The Postelnik, *et al.* patent teaches a different approach to data storage. In the Postelnik, *et al.* apparatus, as shown in Figure 4, a customer’s order 410 is fed into an order request servicing system 110 where it may sometimes be broken up into multiple

provider orders 440 that are routed off to several different order request management systems 120 associated with different suppliers that fulfill different portions of the order. The parts of the order are then processed by the plural order request management systems 120, and the results are returned to the order request servicing system 110 which communicates with the client.

In Postelnik, *et al.*, there does not appear to be any “data access layer operable to provide the process workflow access to the real-time data relating to the transaction, thereby providing a context for the transaction during processing,” as claim 38 requires. Instead, Postelnik’s individual order request management systems 120 each appear to provide their own individual and separate storage which is not accessible by any of the other systems 120, nor is it accessible by the order request servicing system 110. And the system 110 also appears to have has its own individual and separate storage which is not accessible to any of the systems 120, certainly not in real-time. Since Postelnik, *et al.* does not teach providing a real-time data access layer, this combination of reference does not anticipate claims 38-40.

F. Summary

Accordingly, all of the claims are believed to be patentable over the art of record, for the reasons stated above. Dependent claims not separately argued above are allowable because of their dependency upon other allowable claims. Accordingly, early and favorable action is respectfully requested.

I. Conclusion

Applicant believes that the present application, as amended, is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. **503286**. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. **503286**. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. **503286**.

Respectfully submitted,

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By /James A. Sprowl/

Perry J. Hoffman
One of the attorneys for Applicants
Reg. No. 37,150
Telephone (847) 446-7399
Perry Hoffman & Associates, P.C.
P.O. Box 1649.
Deerfield, IL 60015
Tel. (807) 809-4285

James A. Sprowl
Attorney for Applicant
Registration No. 25,061
Telephone: 847-446-7399